

APPENDIX B: CLEAN COPY OF PENDING CLAIMS (UNOFFICIAL)

1. A method for the induction of p53-mediated apoptosis in a cell comprising the steps of (a) introducing into said cell an expression construct comprising a nucleic acid segment encoding p53 and a promoter operably linked to said nucleic acid segment, and (b) contacting said cell with at least one inhibitory agent that inhibits DNA repair.
6. The method of claim 1, wherein said expression construct is an adenoviral expression construct.
7. The method of claim 6, wherein said adenoviral expression construct lacks a portion of at least one gene essential to adenoviral replication.
8. The method of claim 7, wherein the essential gene is E1 .
9. The method of claim 1, wherein said promoter is a cytomegalovirus (CMV) promoter.
10. The method of claim 1, wherein said inhibitory agent inhibits the function of a protein selected from the group consisting of c jun, c-fos, poly-ADP ribose polymerase, DNA polymerase β , topoisomerase I, d-TMP synthase, hMTII-A, uracil DNA glycosylase, alkyl-N-purine DNA glycosylase, DNA ligase IV, DNA ligase III, Hap-1, Ref-1, poly-ADP ribose polymerase and DNA-dependent protein kinase.
11. The method of claim 10, wherein said inhibitory agent is a competitor of a gene product selected from the group consisting of c jun, c-fos, poly-ADP ribose polymerase, DNA polymerase β , topoisomerase I, d-TMP synthase, hMTII-A, uracil DNA glycosylase, alkyl-N-purine DNA glycosylase, DNA ligase IV, DNA ligase III, Hap-1, Ref-1, poly-ADP ribose polymerase and DNA-dependent protein kinase.
12. The method of claim 10, wherein said inhibitory agent is an antisense construct encoding at least a portion of a gene selected from the group consisting of c jun, c-fos, poly-ADP

ribose polymerase, DNA polymerase β , topoisomerase I, d-TMP synthase, hMTII-A, uracil DNA glycosylase, alkyl-N-purine DNA glycosylase, DNA ligase IV, DNA ligase III, Hap-1, Ref-1, poly-ADP ribose polymerase and DNA-dependent protein kinase.

13. The method of claim 10, wherein said inhibitory agent is a retinoid.
14. The method of claim 13, wherein said retinoid is the synthetic retinoid SRI 1220.
15. The method of claim 10, wherein said inhibitory agent is 3-aminobenzamide.
16. The method of claim 1, further comprising the step of providing a DNA-damaging agent.
17. The method of claim 16, wherein said DNA-damaging agent is selected from the group consisting of cisplatin, carboplatin, VP 16, teniposide, daunorubicin, doxorubicin, dactinomycin, mitomycin, plicamycin, bleomycin, procarbazine, nitrosourea, cyclophosphamide, bisulfan, melphalan, chlorambucil, ifosfamide, merchlorheptamine, taxol, taxotere, anthracyclines and ionizing radiation.
18. The method of claim 1, wherein said cell is a tumor cell.
19. The method of claim 18, wherein said tumor cell is selected from the group consisting of lung tumor cell, a prostate tumor cell, a breast tumor cell, a colon tumor cell, a liver tumor cell, a brain tumor cell, a kidney tumor cell, a skin tumor cell and an ovarian tumor cell.
20. The method claim 18, wherein said tumor cell is selected from the group consisting of a squamous cell carcinoma, a non-squamous cell carcinoma, a glioblastoma, a sarcoma, a melanoma, a papilloma, a neuroblastoma and a leukemia cell.
21. The method of claim 18, wherein said tumor cell is in a subject.
22. The method of claim 21, wherein said subject is human.

23. The method of claim 21, wherein said inhibitory agent is delivered by direct intratumoral injection.
24. The method of claim 1, wherein said expression construct is delivered by direct intratumoral injection.
25. The method of claim 23, wherein said injection comprises continuous perfusion.
26. The method of claim 24, wherein said injection comprises continuous perfusion.